

t51_normform (TMLgt5gdfi1fDnGXeh73fXZV7Bjmx5zAjLp)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k7_normform : \iota \Rightarrow \iota$ be given. Let $k9_normform : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_normform : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (k9_normform X0 (k10_normform X0 (k9_normform X0 X1) X2) = \\ & k9_normform X0 (k10_normform X0 X1 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (k10_normform X0 X1 X2 = k10_normform X0 X2 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (r1_tarski (k9_normform X0 X1) X1) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_finsub_1 X0)) \Rightarrow (\forall X2. \\ & (r1_tarski X2 X1) \Rightarrow (m1_subset_1 X2 (k5_finsub_1 X0))) \end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k5_finsub_1 (k7_normform \\ & X0))) \Rightarrow (k9_normform X0 (k10_normform X0 X1 (k9_normform X0 X2)) = \\ & k9_normform X0 (k10_normform X0 X1 X2))) \end{aligned}$$